

From owner-qrp-1@netcom.com Tue Sep 20 01:39:23 1994
Message-Id: <199409200321.XAA08390@thor.INS.CWRU.Edu>
From: Stephen Trier <sct@po.cwrui.edu>
Date: 20 Sep 1994 03:21:32 GMT
Subject: Re: 10-20 meters

doug@acpy01.utsd.att.com writes:

> My question is: how weak does the signal have to be when it reaches the
> mixer circuit (in watts)...

Mixers have their third-order intercept points rated, and you want to stay a bit below that. (How far below I don't know.) Minicircuits mixers have intercept points ranging from 7 dBm to 27 dBm, if I remember correctly. That's 5 mW to 500mW, depending on the mixer.

> ...how do I build an attenuator to take 25 watts and put out a weak signal
> so I don't blow the mixer.

The milliwattting guys will know how to do this better than I do, but I'd guess that any standard 50 ohm attenuator design would work. The catch is finding non-inductive resistors hefty enough to handle all of that power dissipation. The techniques used to build dummy loads from multiple 2-3 W resistors will probably be useful. Figure on between 20 and 40 dB of attenuation and you'll be on the right track.

As a nice side-effect, the attenuator will serve double duty as a dummy load. ;-)

Can you turn down the power from the rig at all?

There are some impressive high-level mixers built by the tube guys. Tubes are an odd way to do QRP these days, but some of those mixers could probably handle 5W. Has anyone had experience with these?

Stephen

--

Stephen Trier "Here, but for an extraordinary physics teacher,
sct@po.cwrui.edu goes a saxophone player."
KG8IH - Albert Overhauser, National Science Medal winner

From owner-qrp-1@netcom.com Tue Sep 20 05:08:44 1994
Date: Mon, 19 Sep 1994 14:35:31 +0800
From: Raymond.Anderson@EBay.Sun.COM (Ray Anderson)
Message-Id: <9409192135.AA12464@uranium.EBay.Sun.COM>

```
>
> I've been following all of this with interest, and now I think I want to
> try this too!
>
> I know that for my rig (a Uniden HR2600 10m only) I would need an
> attenuator to drop the 25 watt 10 meter signal down to something much
> lower that a mixer circuit can handle.
>
> My question is: how weak does the signal have to be when it reaches the
> mixer circuit (in watts) and how do I build an attenutor to take 25 watts
> and put out a weak signal so I don't blow the mixer. (You may
> assume the mixer is either a 40673 or an SBL-1).
>
> Doug KA2UPW
> doug@acpy01.utsd.att.com
>
>
```

Since your rig is putting out 25 watts (+44 dBm) you need to drop the difference (44 dBm - 7 dBm)= 37 dB in an attenuator.

$$\begin{array}{c} \text{---R1---+---R2---} \\ | \\ \text{R3} \end{array}$$

|
-----+-----

Where $R1 = R2 = 47 \text{ ohms}$
 $R3 = 1.5 \text{ ohms}$

R1 will need to handle most of the 25 watts

You could try an L-pad also (only needs 2 resistors) but at least one of them is going to be a high power type.

The moral is: You are going to need some hi-power non-inductive resistors to build the attenuator pads.

or

Try this: get a few 100 feet of cheap RG58 coax (or even something smaller). This stuff is really awful as a 10 meter feedline, but is a cheap 10 meter attenuator (RG58 is about 3.5 dB per 100 feet at 10 meters). Put the long piece of coax between the 25 watts coming out of the TX and the attenuator going to the mixer. This way you can get away with lower power resistors. For every 100 feet of coax you can cut the power in half.

The bottom line is that you need to burn up and dissipate a bunch of RF. It might be better to modify the rig to turn it into a QRP unit by playing with the biasing on the power amp.

As far as the 40673 dual gate mosfet goes as a mixer, it is a high impedance device that only needs a small amount of power to turn it on, but you still need to dissipate the bulk of your 25 watts of drive if you don't want to cook your device.

72's de WB6TPU Ray

raymonda@uranium.ebay.sun.com

From owner-qrp-l@netcom.com Tue Sep 20 05:33:43 1994
Message-Id: <9409191708.AA20129@kaos.ksr.com>
Subject: Re: 10-20 meters
Date: Mon, 19 Sep 94 13:08:46 -0400
From: "John F. Woods" <jfw@ksr.com>

> [the real problem is how to convert the 5W 28MHz TX down to 14MHz]

I thought I mentioned that in my message (did it make it through)?

I think the answer is "you don't". Even if you found a mixer that could run at the 5W level (good luck), you'd still need to follow it with a few stages of selectivity; you might as well either crank down the transmitter or use a resistive pad, and count on a mixer and two or three stages of amplification. If it's a CW rig, you're almost better off building a dedicated 14MHz transmitter, unless the keying sequencer for the existing rig is really, really nice.

From owner-qrp-1@netcom.com Tue Sep 20 05:38:20 1994
Date: Mon, 19 Sep 1994 18:15:52 -0700 (PDT)
From: Alan Kaul <kaul@netcom.com>
Subject: Re: 10-20 meters
Message-Id: <Pine.3.89.9409191829.A1784-0100000@netcom11>

Ray -- doesn't mixing a 28 mHz USB signal with a 42 mHz LO = 14 mHz LSB??
Similar to the 5 mHz LO and the 9mHz SSB generator which mixes to upper sideband on 20 and lower sideband on 80. ?? 72 de alan

[<Alan Kaul, W6RCL>] kaul@netcom.com

From owner-qrp-1@netcom.com Tue Sep 20 14:12:46 1994
Date: Tue, 20 Sep 1994 08:33:33 +0800
From: Raymond.Anderson@EBay.Sun.COM (Ray Anderson)
Message-Id: <9409201533.AA12839@uranium.EBay.Sun.COM>
Subject: Re: 10-20 meters

>
> Ray -- doesn't mixing a 28 mHz USB signal with a 42 mHz LO = 14 mHz LSB??
> Similar to the 5 mHz LO and the 9mHz SSB generator which mixes to upper
> sideband on 20 and lower sideband on 80. ?? 72 de alan

>
>
> [<Alan Kaul, W6RCL>] kaul@netcom.com
>
>

Alan-

Yes it does. when you use high side LO mixing, besides the tuning being backwards, you also get sideband inversion.

If the 10 meter rig has selectable sidebands, this is no big deal, but if the 10 meter rig is hardwired to USB then the resulting 20 meter signal would be LSB (not too useful). That wa a good point to mention.

72's de WB6TPU Ray
raymonda@uranium.ebay.sun.com

From owner-qrp-1@netcom.com Tue Sep 20 20:00:12 1994
Date: Tue, 20 Sep 94 15:21:14 EDT
From: teda@meaddata.com (Ted Albert)
Message-Id: <9409201921.AA02000@rain.meaddata.com>
Subject: 160 meter activity night

Well... I called and called but did not work anyone. I moved down to 1810 and found Bob, NA4G working someone qrp, went back to my calling frequency to check, went back to Bob's frequency and he was gone. Sounded like he might have been using the ARC-5....Bob??? Also heard a WB8? calling qrp on 1810 but lost him in the noise. Even with the NB, the noise was rough at my location last night.

Did anyone else try last night??

73 de Ted, KF8EE

From owner-qrp-1@netcom.com Wed Sep 21 03:06:19 1994
Message-Id: <9409201659.AA22387@ig1.att.att.com>
From: mvjif@mvubr.att.com (James M Fitton +1 508 960 2577)
Date: 20 Sep 94 16:57:00 GMT
Subject: 72

Gang,
Some GREAT stories came out of QRP-AFIELD....
The folks who read 72 newsletter, will be dying to hear about your exploits....

The folks at QRP Club of New England are extremely pleased with the turn-out, in spite of getting drenched to the bone, but these are what memories are made of.

Unfortunately we took no photos. Wait till next year !!!

If you do NOT want your QRP-AFIELD e-mail printed in 72, let me know ASAP, otherwise - Good Luck !

Please send in your scores, stories and photos.

Who won the trophy ?

Thanks again.....

72 Jim, W1FMR

From owner-qrp-1@netcom.com Wed Sep 21 02:53:09 1994
From: K7YHA@aol.com
Message-Id: <9409202000.tn268996@aol.com>
Date: Tue, 20 Sep 94 20:00:00 EDT
Subject: Argonaut 509

I am looking for an Argo 509 in reasonably good condition (it does not need to be pristine or mint....it's gonna get used) for a mobile installation. If you have or know of some one who has one for sale, please pass along the info. Price DOES matter. People are getting absolutely crazy on prices for used T-T QRP gear. Looking for something around the \$150-175 price range.

72 Rich

From owner-qrp-1@netcom.com Tue Sep 20 18:40:39 1994
Message-Id: <9409201909.AA07000@ig1.att.att.com>
From: mvjff@mvubr.att.com (James M Fitton +1 508 960 2577)
Date: 20 Sep 94 19:09:00 GMT
Subject: Beginner Tuner

>From mvjff Tue Sep 20 15:07 EDT 1994
>From: mvubr!mvjff (James M Fitton +1 508 960 2577)
To: att!LARK.JSC.NASA.GOV!KELL
Subject: Re: EFLW
Status: R

It is easy to build an experimental L network antenna tuner

..... 1 coil (with a cliplead to vary it's number of turns)
and a variable cap (365 pf from an old AM radio)
and mount them on a pine board. If it works well, refine it.
If it doesn't, either change it, or the antenna length.

ARRL - Authors.....An opportunity !!!

Show the beginner how to build, and use a SIMPLE, effective
low power, multi-band, "L Matcher" to use with a (random)
or specific length wire antenna and counterpoise radials.

Build it large, simple, flexible and cheap, to encourage
the newcomer and have it work the first time.

Next, find a way to miniaturize and package it for the field.

Otherwise see p.166 in solid state design. and you can just use just the tuner part if you already have a SWR indicator.

L matcher:

If this doesn't work,
try interchanging rig and ant.
One way is for a high Imp. antenna and the other
way for a low Imp. antenna.

```

                Variable
                cap
rig-----|---||-----ant.
          |
          )  coil
          )
          ).....<  cliplead
          |
          Ground
```

72 Jim, W1FMR

h

From owner-qrp-l@netcom.com Tue Sep 20 01:41:48 1994
Date: Mon, 19 Sep 94 19:02:33 PDT
Message-Id: <9409200202.AA22998@altair.csustan.edu>
From: dh@altair.csustan.edu (Doug Hendricks)
Subject: Building the Epiphyte

I was so excited after the QRP Afield that I decided to finally get around to building my own Epiphyte SSB transceiver. It was designed by Derry Spittle, VE7QK, and featured in the September issue of QRPp. Derry sent me a built and tested board and I put in the case and added the connectors and controls, but I wanted one that I had built myself.

One of the things that I do is keep a list of parts that I need for projects. When I get over to San Jose and stop by the surplus houses, I try and pick up parts on the list. It is a good idea, but sometimes I am not as organized as I should be. This is the way it works. I buy the parts, bring them home, and put them away in a neat place so I can find them again. But the problem is that often, I forget where I put them, and I spend hours looking for parts that I know I have. The past three months, I have been accumulating parts for the Epiphyte, and today was the day to start building.

Derry provided the artwork for the pcboards to NorCal, and we paid Far Circuits to develop them and make them available to QRPers. Derry is not

making anything from the boards, nor is NorCal. It is just a service that Derry is providing to his fellow hams. I ordered my boards from Far Circuits and they arrived in August, but I put them away as I did not have time to build the rig then. The boards are beautiful, and Derry and Fred have a product that they can be proud of. It is well layed out and easy to work with.

The first thing that I decided to do was to mount the Murata Filter. Ahhh, the elusive Murata Filter. The rig calls for a 455KHz Murata Filter, and the only place that I know that it is available is Cirkit in England. I ordered 20 of them, and have 10 left if anyone needs one. They are \$20 each, but that includes shipping. If anyone knows of a US source for this part, I would dearly love to know. I soldered the filter in and the project was underway. The next step was to solder in the IC sockets, and of course, I put one in backwards. But I expect to do that, since I need the practice of using solder wick. After the sockets came the 3 Toko Coils and the 65 pF trim cap. Then I put the ceramic resonators and the transistors in. By the way, I subbed a J310 for the MPF102's that it calls for.

The capacitors came next and that is when I hit my first snag. Despite my huge junkbox (Wayne Burdick comes to me for parts when he is prototyping), I didn't have a couple of the caps for the board. I will have to give Dave Joseph, fellow NorCal Club member and more importantly, a clerk at one of the local surplus stores in San Jose. I will give him a list and he will ship them to me on Monday.

So, it is time to stop for tonight. Tomorrow I must go to Sacramento, so it will be a day or two before I get back to the project. I will keep you informed and let you know of any pitfalls on the way.
72, Doug, KI6DS

From owner-qrp-1@netcom.com Tue Sep 20 05:08:08 1994
From: CQC@aol.com
Message-Id: <9409191848.tn176698@aol.com>
Date: Mon, 19 Sep 94 18:48:40 EDT
Subject: Email Address needed

Does anyone have a Email address for the St. Louis QRP Society?

72, Rich WOHEP
Colo. QRP Club

From owner-qrp-1@netcom.com Wed Sep 21 00:23:08 1994
From: David Adams <dave@flowserver.stem.com>
Message-Id: <9409210206.AA11413@flowserver.stem.com>
Date: Tue, 20 Sep 94 19:10:23 -0700
Subject: Hamkits

Has anyone dealt with Hamkits in Crown Point Indiana? It is my home

town, so I would like to get something from them, but I need to know a few things:

A) What kits do they sell?

b) Are the kits any good?

C) Is there a phone number to reach them or just a mail thing?

Dave

From owner-qrp-1@netcom.com Tue Sep 20 05:01:12 1994

From: JimN00CT@aol.com

Message-Id: <9409192011.tn183902@aol.com>

Date: Mon, 19 Sep 94 20:11:40 EDT

Subject: HR2600 20 m mod

I know that for my rig (a Uniden HR2600 10m only) I would need an attenuator to drop the 25 watt 10 meter signal down to something much lower that a mixer circuit can handle.

My question is: how weak does the signal have to be when it reaches the mixer circuit (in watts) and how do I build an attenuator to take 25 watts and put out a weak signal so I don't blow the mixer. (You may assume the mixer is either a 40673 or an SBL-1).

In my 2600 you can pull out a jumper board that defeats the power to the finals. That might be a good place to take your signal from, and then build an outboard QRP amp past that.

72, jim n0oct

From owner-qrp-1@netcom.com Tue Sep 20 21:44:33 1994

Message-Id: <9409202157.AA28410@atm.com>

Date: Tue, 20 Sep 1994 15:01:45 -0700

From: xenolith@halcyon.com (Kevin Purcell)

Subject: Re: HR2600 20 m mod

>

>In my 2600 you can pull out a jumper board that defeats the power to the
>finals. That might be a good place to take your signal from, and then build
>an outboard QRP amp past that.

>

>

>72, jim n0oct

Or to take this one step further find out where the TX IF is (before the final mix up to 28Mhz) and tap it there. The same with the RX IF.

The just build a RX front end and a TX mixer and amp.

If you find the IF is 9Mhz then you can easily build a imaging 80/20 txrx.

Careful with that sideband, Eugene.

Kevin Purcell, N7WIM / G8UDP
Attachmate Corp

kevinpu@eve.atm.com
xenolith@halcyon.com

206/649-6489

From owner-qrp-l@netcom.com Tue Sep 20 12:11:14 1994
From: "Doyle, Ron" <doyler@uh2297p01.daytonoh.NCR.COM>
Subject: Information wanted on a Palomar pw-5000 meter
Date: Tue, 20 Sep 94 08:53:00 PDT
Message-Id: <2E7F073F@p003103gw1.daytonoh.ncr.com>

A friend gave me a meter last night that he thinks he fried by hooking the power up backwards (Wasn't this foopaw mentioned just recently?? hmmm). The meter looks like it is made by Palomar (logo on front panel). It came with one sheet for an Operation Manual. No prints, No address of manufacturer, nothing real useful in fact.

This thing has 3 meters, Power, SWR, and Percent Modulation. After looking inside I don't see any burned lands. Haven't been able to get to both sides of the board (actually there are 2) to see the parts side. The boards are mounted from the face plate side and the face plate is thin and glued on. Looks like it will take lots of patients will be needed to get it off without extreme damage. I applied power and the meter lights do light up, no smoke so probably no series shorts. This looks like to me a worthy project to fix and since I need such a meter I hope to try.

Now the question. Does anybody have an address or phone number for the manufacturer (Palomar) or have any information on the meter that might help me?? My email address is attached as a signature to this message.

Now for the QRP part of the message. I have been reading with great interest about all of the rigs mentioned and the fun stories about QRP Afield. Ahhh, maybe next year. I even tried some QRP with my Heath SB401/303, cranked down of course. I was very surprised and the outcome. Even talked to a guy who had his beam pointed the opposite direction.

Turning the beam towards me made no difference in the signal report which was a 599, very impressive. I was having lots of fun until my receiver broke :(. I am now in the process of rebuilding my station. The portable stuff sound like a lot of fun. I am involved with scouting and hope to get some of my scouts interested. I hope to be on the air during the JOTA October 15. There will be lots of big guns but I am going to try some qrp and see what happens.

Currently my equipment list looks like this:

Heathkit SB401/303 w/ broke receiver cranked down of course, when working Kenwoodie 435, again Cranked down.

Some misc. tuners, monitors and power supplies

Lots of loose parts, I even know what some of them are!

(Hmmm, I can see a lack of qrp only stuff, will have to work on that.)

I have greatly enjoyed the net and hope to leech lots more from the pro's.

72 es cul de Ron, N8VAR

Ronald Doyle N8VAR AT&T GIS - Dayton

AT&T GIS: 622-3179 <Ronald.Doyle@DaytonOH.NCR.COM>

(513) 445-3179 FAX: 445-7542

From owner-qrp-l@netcom.com Wed Sep 21 03:24:02 1994

From: jcumming@clark.dgim.doc.ca (Jim Cummings)

Message-Id: <9409201726.AA24563@clark.dgim.doc.ca>

Subject: Information wanted on a Palomar pw-5000 meter (fwd)

Date: Tue, 20 Sep 1994 13:26:25 -0400 (EDT)

Forwarded message:

> From owner-qrp-l@netcom.com Tue Sep 20 12:05:05 1994

> From: "Doyle, Ron" <doyler@uh2297p01.daytonoh.NCR.COM>

> To: QRP <qrp-l@netcom.com>

> Subject: Information wanted on a Palomar pw-5000 meter

> Date: Tue, 20 Sep 94 08:53:00 PDT

> Message-Id: <2E7F073F@p003103gw1.daytonoh.ncr.com>

> Encoding: 49 TEXT

> X-Mailer: Microsoft Mail V3.0

> Sender: owner-qrp-l@netcom.com

> Precedence: list

>

>

> A friend gave me a meter last night that he thinks he fried by hooking the power up backwards (Wasn't this foopaw mentioned just recently?? hmmm).

^^^^^^

I really can't resist, even though it is not DIRECTLY related to QRP. I think that "foopaw" is a faux pas (hee hee). Faux pas comes from French, literally meaning "false step". (The pronunciation of faux more closely resembles our word "toe", a DIGITAL (I know I should be ashamed of myself, but I'm not) appendage of the foot. So that is our lesson on extra-English vocabulary.

With that in mind, anybody wish to compare foopaw with FUBAR? Just a thought....

James of Rockland
VE3XJ

From owner-qrp-l@netcom.com Tue Sep 20 05:00:35 1994
Message-Id: <9409200309.AA20294@mesa5.Mesa.Colorado.EDU>
Subject: Joining
Date: Mon, 19 Sep 1994 21:09:48 +0000 (MDT)
From: "jim rybak" <jrybak@mesa5.mesa.colorado.edu>

Please tell me how I can join this forum.
Thanks.

73, Jim Rybak W0KSD

From owner-qrp-l@netcom.com Tue Sep 20 11:46:46 1994
Date: Tue, 20 Sep 1994 08:01:33 -0500 (CDT)
From: Kevin Anderson <anderson@ncrsun1.ncr.usace.army.mil>
Subject: Re: Joining
Message-Id: <Pine.3.89.9409200834.A4000-01000000@ncrsun1>

On Mon, 19 Sep 1994, jim rybak wrote:

> Please tell me how I can join this forum.
> Thanks.
>
> 73, Jim Rybak W0KSD
>

Jim, the QRP forum is now on netcom.com and is known as QRP-L. To join, send a subscribe QRP-L message to listserv@netcom.com. To submit mail to the list, send your message to qrp-l@netcom.com. 72 Kevin KB9IUA

Kevin L. Anderson, CENCR-PD-W, U.S. Army Corps of Engineers
Rock Island District Office, Planning Div.-Waterway Systems

Rock Island, Illinois 61204-2004, USA phone:(309) 794-5605
e-mail: anderson@ncrsun1.ncr.usace.army.mil

Opinions expressed here are my own and do not represent the
U.S. Army Corps of Engineers or the Federal Government.

From owner-qrp-1@netcom.com Tue Sep 20 10:29:18 1994
From: Mike.Czuhajewski@hambbs.wb3ffv.ampr.org (Mike Czuhajewski)
Subject: MILLIWATT reprints: taking orders
Date: Tue, 20 Sep 94 07:33:16 EST5EDT
Message-Id: <1994Sep20.073316.23473@wb3ffv.ampr.org>

We have decided to go ahead with the (non-profit) reprints of The Milliwatt. Neither my partner nor I can front the money for this, which will be quite a few hundred dollars if everyone who expressed interest places an order, so we must take orders in advance. The cost is \$22 US dollars "postpaid" in the US and Canada. (UPS will be used wherever possible.) If anyone outside the US wants to order a set, contact me and we'll see if we can work out some method of payment. My partner told me it will be an extra \$2.50 for surface shipment, \$11 extra for air.

I will accept orders for about two weeks, and then give my partner the go-ahead to go to the printer. They will be shipped from Ohio. I don't know how long the printing will take, but we should have things on the way in about a month (guess).

Please make the \$22 (US dollars) checks or money orders out to Michael A. Czuhajewski, and write "Milliwatt reprints" somewhere on them. Send them to me at 7945 Citadel Drive, Severn, MD 21144. (Do NOT make them payable to Milliwatt Reprints.) Please include a street address so we can use UPS; if you absolutely cannot give a street address, we will (reluctantly) use the US postal service.

Whether we actually go ahead with this or return all the money depends on the number of orders received. The price was based on the cost the printer gave us for 50 copies. If we have to order substantially fewer, the cost per piece will be higher; charging \$22 allows us some cushion for higher printing costs, so we have to play this one by ear.

If you decide to order a copy, please send me an e-mail to let me know, and I'll get back to you if it never arrives. If you procrastinate for a while and are near the deadline for ordering, don't worry about it too much; just send an e-mail and drop the check in the mail. My partner said the printer will give us 30 days to pay so we have some leeway.

THE FINE PRINT

As previously stated, this is a non-profit photocopy reprinting of the Milliwatt, priced high enough so that all reasonably expected expenses will be covered, along with a comfortable cushion to cover unexpected ones. Money remaining after all expenses are covered will be donated to one or more regional/local QRP groups of our choice (with the Maryland Milliwatts specifically excluded, of course--conflict of interest).

This is a photocopying reprinting of material published between 1970 and 1975; although it is in the same format as SPRAT, The Five Watter and QRPp, do not expect the same quality; it was published back in the good old days when things were typed up and pasted on paper and offset printed; computer technology was years away from widespread use, and laser printers existed only in science fiction. The original set of "master copies" were made by slapping the magazines open-faced on a copier; you will have to turn the book sideways to read it.

These are also second generation photocopies, although the last two sets I did myself a couple years ago turned out well. This time around they will be printed on both sides of the paper--that cuts it down from 360 sheets to a mere 180 sheets. Bill tells me they will be bound into two volumes of 90 sheets each, with comb binders and heavy (card stock) covers.

I am doing this project together with N8ET, Bill Kelsey of Kanga US (who is doing this as a private citizen, not as a company project). Both of us are fairly well known in the QRP community; Bill has been running Kanga US for several years, and I've been writing for the QRP Quarterly--articles and a column--for years. If you're still a bit concerned about sending money in advance, I'm sure that scams done via Internet/USENET fall under federal wire fraud statutes, so even if we do run off to Rio with your money they'll extradite us and throw us in the slammer!

We'll be making a very few extra copies, but don't count on being able to get one. We are not going to stock any for future sales, although we may do this again if there is enough interest.

73 and Queue Our Pea DE WA8MCQ

--

Mike Czuhajewski, user of the UniBoard System @ wb3ffv.ampr.org
E-Mail: Mike.Czuhajewski@hambbs.wb3ffv.ampr.org
The WB3FFV Amateur Radio BBS - Located in Baltimore, Maryland USA

Supporting the Amateur Radio Hobby, and TCP/IP InterNetworking

From owner-qrp-1@netcom.com Tue Sep 20 15:38:55 1994
Message-Id: <9409201635.AA08159@ig1.att.att.com>
From: mvjf@mvubr.att.com (James M Fitton +1 508 960 2577)
Date: 20 Sep 94 16:36:00 GMT
Subject: More tips

Some have had trouble radiating with an End Fed Long Wire

If you are not getting out, or cant match for low SWR:

Borrow a 2nd tuner, or build another type (simple L match).
and ask a friend for a signal comparison between tuners.

2, 3, 4 or 5 quarter wave radials (counterpoise) are much much
better than 1 long one. Cut the long one in half.

The high current part of the antenna is where radiation takes place.

The (away from you) open end of the antenna (most likely) has high
impedance to ground, therefore, LOW current.

Where you have the antenna connected to the tuner may be relatively
low imp. and high current.

Try to get enough wire up in the tree so that a high current node
is located at a high point on the antenna.

Example....

The current maxima occurs ~ 33 ft. from the open end on 40m.
The current maxima occurs ~ 16 ft. from the open end on 20m.
The current maxima occurs ~ 8 ft. from the open end on 10m.
Or at 1/4 wave from the open end.

Many old timers do not know this but have stumbled onto
a "magic" length. I use ~ 100 ft, for 40m, and cut a
little off the end near the tuner, till it is able to
be "Matched".

This stuff is magic. Read in the Antenna Handbook, and experiment
at home. Winter is rapidly coming to New England, and along with
it some of the finest outside antenna experimenting weather to be
found anywhere. Sorry for all you folks in CA and AZ, with your
(70 degree) poor experimenting weather.

Good luck.....72.

Jim, W1FMR

From owner-qrp-1@netcom.com Tue Sep 20 23:22:29 1994
Date: Tue, 20 Sep 1994 11:57:48 -0700 (PDT)
From: "H. Ward Silver" <hwardsil@seattleu.edu>
Subject: Re: More tips
Message-Id: <Pine.3.07.9409201143.C26116-a100000@bach>

On 20 Sep 1994, James M Fitton +1 508 960 2577 wrote:

>
> Example....
> The current maxima occurs ~ 33 ft. from the open end on 40m.
> The current maxima occurs ~ 16 ft. from the open end on 20m.
> The current maxima occurs ~ 8 ft. from the open end on 10m.
> Or at 1/4 wave from the open end.

>
These are also good places to FEED a long wire and offer a much lower impedance. Attach coax or open-wire at a low-impedance point like a regular dipole. You get exactly the same pattern for the long-wire, less all of the vertical feed-wire radiation, so the directivity and depth of pattern nulls is maintained. Works good!

73, Ward N0AX

From owner-qrp-1@netcom.com Wed Sep 21 02:48:17 1994
Date: Tue, 20 Sep 94 12:37:41 PST
From: Mike J Pulley <Mike_J_Pulley@ccm.ch.intel.com>
Message-Id: <940920123741_1@ccm.hf.intel.com>
Subject: Re: More tips

Text item:

Ignore antenna lengths. Ignore engineering equations. Ignore tuner flavors. Everyone knows any antenna born during an ice storm or blizzard will outperform everything that could be engineered under warmer conditions. It's one of the Santac Laws.
<yuk! snort!> :-)

You in the colder climes get all the breaks! We here in AZ can only dream of the performance you guys can get from merely loading up your mailbox or storm window frames. Bone crushing!

Maybe I could get someone up there to build an antenna for me during a storm and ship it to me before it thaws. Oh... if only... <sigh>

: -)

Regards,

-- Mike, WB4ZKA

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=====
Mike Pulley                               Intel Corporation
Phoenix, Arizona (USA)                   Mike_J_Pulley@ccm.hf.intel.com
"People who say that there is no panacea have just never owned
  a Swiss army knife." -- Thomas Sowell, 12/3/93
=====
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----- Reply Separator -----

Subject: More tips
Author: owner-qrp-1@netcom.com at Internet_Gateway
Date: 9/20/94 11:15 AM

(Jim Fitton, W1FMR, makes several comments about the care and feeding of long wire antennas.)

<snip!>

This stuff is magic. Read in the Antenna Handbook, and experiment at home. Winter is rapidly coming to New England, and along with it some of the finest outside antenna experimenting weather to be found anywhere. Sorry for all you folks in CA and AZ, with your (70 degree) poor experimenting weather.

Good luck.....72.

Jim, W1FMR

Text item: External Message Header

The following mail header is for administrative use and may be ignored unless there are problems.

IF THERE ARE PROBLEMS SAVE THESE HEADERS.

Precedence: list
Sender: owner-qrp-l@netcom.com
Subject: More tips
Original-Cc: mvubr!mvjf (James M Fitton)
To: qrp-l@netcom.com
Original-From: mvubr!mvjf (James M Fitton +1 508 960 2577)
Cc: mvjf@mvubr.att.com (James M Fitton)
Date: 20 Sep 94 16:36:00 GMT
>From: mvjf@mvubr.att.com (James M Fitton +1 508 960 2577)
Message-Id: <9409201635.AA08159@ig1.att.att.com>
Received: from mvubr.UUCP by ig1.att.att.com id AA08159; Tue, 20 Sep 94 12:35:39
Received: from gw1.att.com by mail3.netcom.com (8.6.9/Netcom)
id JAA09585; Tue, 20 Sep 1994 09:35:23 -0700
Received: by mail3.netcom.com (8.6.9/Netcom)
id JAA09621; Tue, 20 Sep 1994 09:35:33 -0700
Received: from mail3.netcom.com by hermes.intel.com (5.65/10.0i); Tue, 20 Sep 94
Received: from hermes.intel.com by relay.jf.intel.com with smtp
(Smail3.1.28.1 #2) id m0qn9iY-000tweC; Tue, 20 Sep 94 11:15 PDT

From owner-qrp-l@netcom.com Tue Sep 20 05:38:23 1994
Message-Id: <9409192002.AA23001@ig1.att.att.com>
From: mvjf@mvubr.att.com (James M Fitton +1 508 960 2577)
Date: 19 Sep 94 19:59:00 GMT
Subject: NC40

I forgot my mini-R.S. audio amplifier at home, during QRP-AFIELD,
and the wind noise is very high near the ocean. Unfortunately,
I did the same thing last spring. (You cant teach an old dog CW)

Any NorCal-40 mods to increase headset volume ?

Jim, W1FMR

From owner-qrp-l@netcom.com Wed Sep 21 02:48:48 1994
Date: Tue, 20 Sep 94 18:01:57 EDT
From: "karayan" <karayan@itc.cc.bellcore.com>
Message-Id: <9408207801.AA780109317@itc.cc.bellcore.com>
Subject: PopElec 50 MHz counter

Hi gang! Well, as soon as I read the article posted about the 50 MHz counter, I
ran and bought a copy of Popular Electronics. Indeed, it looks like a good and
easy project. However, I have a couple of questions:

1) What I'd like to use it for is in combination with an SWR analyzer. I'm too

poor to buy the MFJ analyzer with built-in freq counter. I thought of buying the cheap analyzer (\$80? - anyone knows where I can find a used one?) and combine it with the freq counter. The article states that above 2 MHz, sensitivity is about 800mV. Is that sensitive enough for the output of the MFJ SWR analyzer?

2) I figured that the total cost for the counter, if I buy the kit advertized, is \$50. Is that a good price for a freq counter?

Thanks in advance.

73-delta
de N2OWO
(In real life: George Karayannopoulos)
karayan@cc.bellcore.com

From owner-qrp-l@netcom.com Tue Sep 20 05:43:03 1994
Message-Id: <9409191805.AA17801@ig1.att.att.com>
From: mvjfm@mvubr.att.com (James M Fitton +1 508 960 2577)
Date: 19 Sep 94 18:02:00 GMT
Subject: Port.ant

For ease of antenna erection, and excellent versatility at almost any location, it is hard to beat the end fed long wire.

A dipole is a better antenna, but on 40m it is quite time consuming to erect.

Sloping and inverted vee dipoles are easier to erect, but not as easy as the E.F.L.W.

Additional gear needed for an EFLW and other non-balanced antennas:

1. Some quarter wave length wires laying on the floor/ground to act as an RF ground or counterpoise. Connect them to the ground terminal of the tuner.
2. An antenna tuner
3. A sensitive SWR meter or bridge.

There will be some loss through a tuner, but as I get older, I am willing to sacrifice an almost unmeasureable amount (approximately 0.2 db) of signal loss in order to get on the air sooner with less frustration.

See pages 152, Fig.26 and pg.167 of Solid State Design for a tuner/bridge that can be made very tiny. A sensitive, tiny, edge mounted meter is desirable, and a 100 microampere meter will provide about 50 milliwatts full scale sensitivity. Scour the flea markets and snap up small, sensitive meters. Radio Shack sells some 100 ohm 1 watt film power resistors that can be paralleled to provide 50 ohms (fig 26). You can experiment with inductor and capacitor values that will make your test antenna and counterpoise behave, prior to taking them out into the field.

Jim, W1FMR

From owner-qrp-1@netcom.com Wed Sep 21 04:15:29 1994
Date: Tue, 20 Sep 1994 19:40:32 -0500 (CDT)
From: Bob Howle <bhowle@freud.intersys.jackson.ms.us>
Subject: Re: Port.ant
Message-Id: <Pine.SOL.3.90.940920193232.7963C-100000@freud>

On 19 Sep 1994, James M Fitton +1 508 960 2577 wrote:

>
> For ease of antenna erection, and excellent versatility
> at almost any location, it is hard to beat the end fed
> long wire.
>
> Jim, W1FMR

For the past couple of years I've used an end fed, trapped sloper for 20 and 40 meters while in the boonies in my pop-up camper. I use the camper's metal roof for a ground - this seems to work well, only needs one good support and can be erected in about five minuets if I make a lucky first shot with my sling shot with 1.5 oz. fishing weight attached.

I do get some curious looks from the camp ground operator when I ask for a camp sight with a really really tall pine tree. I've also found that a few episodes of shooting a line waaay up in a tree and cussing loudly when it misses keeps pesky neighbors away too - nothing worse than wannabe friendly neighbors cutting in to a good band opening. Bah, humbug !

Bob/ WA4ZID

From owner-qrp-1@netcom.com Tue Sep 20 05:32:59 1994

From: blifter@ccd.harris.com (Bruce Lifter)
Message-Id: <9409191936.AA69753@morsg>
Subject: QRP Afield - HARC - Florida - KR4NR
Date: Mon, 19 Sep 1994 15:36:36 -0500 (EDT)

The Harris Amateur Radio Club (HARC) worked QRP Afield as a club event. We met at Wickham Park in Melbourne, FL. We were able to round up about a dozen or so hams (although only about 6 operated). We had two stations on the air:

Station #1: callsign - KR4NR
 antenna - 20M folded dipole at about 25 feet (inverted V)
 rig - Ten Tec Argonaut II ??? (KC4GKY)
 output - Just under 5 watts
 power - 115 Ahr deep cell
 contacts - 14 states, 25 total contacts

Station #2: callsign - AD4TG
 antenna - 30M dipole at about 35 feet
 rig - NE QRP Club 30-40 (AD4TG)
 output - .9 watts
 power - 2.3 Ahr gell cell
 contacts - 4 states, 5 total contacts

Station #1 (KR4NR) was our main station. We kept that one going for about four hours of the contest. Our operators were Frank Hammond KC4GKY, Dick Kircher K2YZ, Carl Letter KR4NR, Doug Snowden N4IJ, and Bruce Lifter AD4TG. Some of our contacts included: K5FO, W1FMR, AA7QU, W1FD, KI6SN... and even one italian station I6DKP. K5FO, in a posting on the QRP reflector, mentioned that we were the loudest on 20 meters. We thank you for your generous comment. I was quite skeptical that a dipole hung so low would get out so well!

Station #2 (AD4TG) was only manned sparingly for about two hours. 30 meters was not real active. Typically one of the operators would wander over to the second station and listen for a few minutes... maybe send out a CQ. I thought we should have a NE QRP Club kit on the site since they were hosting the contest. :-) The NE 30-40 was good conversion piece for explaining the merits of QRP.

Wickham Park was very busy this weekend and we were able to give loads of good publicity to both ham radio and to QRP operation. Our activity was announced on the busiest local 2 meter repeater and we had a number of new hams drop by for a visit. It was nice to compare the expensive commercial rig versus what could be done with an inexpensive kit. We also had a number of non-ham picnickers wander by and ask what we were doing.

All in all we had much fun! I think we will try this one again next year!

73, Bruce AD4TG

--

Bruce Lifter
Harris Corporation
Controls Division

MS: R5-202
email: blifter@ccd.harris.com

From owner-qrp-1@netcom.com Tue Sep 20 05:10:07 1994
Date: Mon, 19 Sep 94 13:23:22 PST
From: Mike J Pulley <Mike_J_Pulley@ccm.ch.intel.com>
Message-Id: <940919132322_1@ccm.hf.intel.com>
Subject: QRP Afield... Arizona Style

Text item: Text_1

Here in the 'burbs of the Phoenix desert, "QRP-Afield" literally means "an excuse to take the family camping in the cool mountains for a weekend". After reading the other accounts, I'm almost embarrassed to report that temps peaked in the mid 70's, no rain fell until after the supper dishes were washed and the kids were snuggled in their bedrolls, and we had no irate landowners dictating where we could and couldn't park! (And they call AZ a harsh place to live?!?)

Rocky Evans, KG7VG, and I decided to tag team for the contest. We ducked out of the office early Friday afternoon and scampered up to Prescott, AZ at 6000' msl. My wife and daughters came along for a weekend in the woods as well. My wife is also a ham, so she is very supportive of such recreational getaways.

I *really* like the shorter 6 hour FD! It allows time to fit in some ham contesting without crowding out other fun activities with family and friends. It prevents a great contest from becoming grueling

Saturday morning at 7:00, Rocky and I started launching lines into the trees for the antenna. First, we had a debate over which direction was east. Suffice it to say I can never show my orienteering merit badge in public again! We used a wrist rocket slingshot to hurl lead weights over the 60' pines and a fishing reel to pull the nylon antenna cords back over the top. As promised here on the net, we hauled up the 20m folded dipole on end for vertical polarization. When we finally stopped tugging and adjusting, the lowest point of the vertical was still a half wave above the ground. The antenna seemed to work fine all day.

Two high school age young men in the campground wandered over from curiosity. When we explained about ham radio in general and the contest in particular, they were all excited. They helped get the antenna up and later returned to see about our progress. One boy mentioned that his electronics teacher at school had offered to help the students get ham licenses. We may have some new hams spring up from this chance encouragement.

On the air at 9:00 MST. Occasionally, the 20m QRP window got squeezed out by the County Hunters on one side and the encroaching packet racket on the other. When that happened, we found a nest of QRP activity sprang up around 14.047. Good enough, sez I.

Jeff, add this next comment to the Dumb Things I Have Done column. First, let it be known that I am a NE-QRP member in good standing, but I haven't memorized my number yet. In programming the memory keyer, I mistakenly inserted my QRP ARCI membership number (#8492). Our first QSO with a NE-QRP member was WU7F, who repeatedly asked for my number. Then he finally asked, "NE nr??" Oops! I don't think NE-QRP is quite that large, yet. I couldn't find my NE-QRP number, so we quickly switched our report to "5W" and carried on. Duh! When I got home, I looked up my NE-QRP number (#248) and memorized it.

Slow going... average rate of 5 QSOs /hour. Far from blistering, but it left plenty of time to chat while the memory keyer pounded out CQ QRP, CQ QRP... (What's the legal limit a station can call CQ unsuccessfully without having to append "/B" after the callsign?)

We worked WU7F, W1FD, N6KR, K5FO, W5WO, AA4XX, KB2JE, VE2DRB, W4OEL, XE1/KG8DA, and JA7KE among others. I can hereby attest that Chuck Adams really **can** operate at 13wpm, contrary to net rumor and lore. He pulled off one of the smoothest moves I've ever seen in a contest exchange, too. When Chuck called, another station was dead on zero beat with Chuck's note. (Don't you hate it when that happens?) I asked him to move up 500Hz, a hazardous thing to ask most operators. The next thing I heard from him was "C" 500Hz away, which I could easily distinguish from the QRM. Nicely done, Chuck! Thanks!

I heard Jim, W1FMR, around 2030Z, but could not raise him despite calling on all known 20m hailing frequencies. After reading his account, he was probably preoccupied with extracting his butt from the tar baby buoy.

We finished at 3:00 MST with 30 contacts, 20 multipliers, and a

portable QRP kilowatt multiplier of x4 to total 2400 points.

The equipment consisted of an MFJ-9020, a Palomar memory keyer, Bencher paddles, MFJ folded dipole suspended vertically, and a 12V battery.

Many thanks to the NE-QRP club for inventing and sponsoring this event. As mentioned by others, it comes at an excellent time of the year. QRP-Afield provides an excellent chance to escape to the hills/beach/park/school yard/driveway to ham in a change of scenery before winter forces us to stare at the same shack walls day after day.

I can hardly wait to try again next time!

Regards,

-- Mike, WB4ZKA

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=====
Mike Pulley                               Intel Corporation
Phoenix, Arizona (USA)                   Mike_J_Pulley@ccm.hf.intel.com
"People who say that there is no panacea have just never owned
  a Swiss army knife." -- Thomas Sowell, 12/3/93
=====
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From owner-qrp-1@netcom.com Tue Sep 20 08:53:20 1994
From: K7YHA@aol.com
Message-Id: <9409200623.tn218620@aol.com>
Date: Tue, 20 Sep 94 06:23:25 EDT
Subject: QRP Books

Requested copies of QRP Vol-I and/or Vol-II have been mailed out to the following: KK6GM, KE3OB, VE2OKL, WB7EEL, NX1K, W1HUE & Scott Guthery.

I still have a couple of sets of both Vols left. For the uninitiated, these are volumes on OPERATING not building.

Cost: \$30 for both volumes or \$15 for Vol-I & \$20 for Vol-II. Send checks or money orders (US FUNDS ONLY) to Rich Arland, 25 Amherst Ave. Wilkes-Barre, PA 18702

72
Rich

From owner-qrp-1@netcom.com Wed Sep 21 03:14:11 1994

From: Mike.Czuhajewski@hambbs.wb3ffv.ampr.org (Mike Czuhajewski)
Subject: QST QRP Article!
Date: Wed, 21 Sep 94 00:03:22 EST5EDT
Message-Id: <1994Sep21.000322.4599@wb3ffv.ampr.org>

Check out the latest issue of QST--mine just arrived today. Veteran QRP'er K7YHA has a good, general interest article on QRP in there--should help stir up some more interest, especially since it has a nice, long list of various QRP groups to join. Also in the same issue is a QRP rig built into one of those little cardboard boxes that 35mm film cans come in (not the can itself). Some of us have gone waaaaaay beyond that point (the "DB-25 Crew", of which I am a charter member), but it's always great to see someone building tiny QRP rigs, which is one of my interests. (No one said things have to be practical--the whole idea is doing whatever is fun for you, and for some of us building little tiny rigs is the fun part!) And keep an eye on QST--there will be another QRP construction project there in the future, from what I hear on the grapevine. 73 and Queue Our Pea DE WA8MCQ

--

Mike Czuhajewski, user of the UniBoard System @ wb3ffv.ampr.org
E-Mail: Mike.Czuhajewski@hambbs.wb3ffv.ampr.org
The WB3FFV Amateur Radio BBS - Located in Baltimore, Maryland USA
Supporting the Amateur Radio Hobby, and TCP/IP InterNetworking

From owner-qrp-l@netcom.com Tue Sep 20 14:14:43 1994
Message-Id: <199409201531.IAA04595@mail3.netcom.com>
Date: 20 Sep 94 09:30:00 CST
From: "SLRC1::M405142" <M405142%SLRC1.decnet@mdcgwy.mdc.com>
Subject: St. Louis QRP Society Meeting

The St. Louis QRP Society will meet Wednesday (every third Wed) at Florissant Valley Community College (on Hwy I-270 at Elizabeth/Washington) at 7:PM in the Engineering building, 2nd floor 'Radio Room'. All are invited; for directions/additional information, contact any member of SLQS or N0XEU Matt (314) 962-1418, or NF0R Dave at NF0R@SLACC.COM

From owner-qrp-l@netcom.com Tue Sep 20 05:26:34 1994
Date: Mon, 19 Sep 1994 15:39:58 -0400 (EDT)
From: prvalko <prvalko@vela.acs.oakland.edu>
Subject: Re: TenTec Argonaut
Message-Id: <Pine.3.89.9409191511.A7307-01000000@vela.acs.oakland.edu>

On Mon, 19 Sep 1994 JHW%GIZMO@rcc.rti.org wrote:

> 1. What is the history of the Argonaut -- what were the later models

>> BTW... when do we get to buy vanity calls?
>> 73 =paul= wb8zjl
>
>Last I heard, was vanity calls were going to cost \$ 150. Clinton
>has to reduce the deficit somehow..
>Stan Goldstein , N6ULU

Over on the rec.radio groups I keep seeing this \$70 figure mentioned.
And why would it be 'stupid' to want my original call sign of WA6QIJ
back? I dislike the N call - I feel like a Navy station everytime
I sign NH6IL.

Jeff

From owner-qrp-l@netcom.com Tue Sep 20 12:36:11 1994
Message-Id: <199409201414.HAA04055@mail.netcom.com>
Date: 20 Sep 94 08:57:00 CST
From: "SLRC1::M405142" <M405142%SLRC1.decnet@mdcgwy.mdc.com>
Subject: Wanted: Heathkit HW-99 (Novice) Xcvr

Wanted: Heathkit HW-99 'Novice' transceiver. Send info on condition,
asking price. THX. -N0XEU (Matt) (314)962-1418 eves. Operate, not Collect!

From owner-qrp-l@netcom.com Tue Sep 20 08:52:49 1994
Date: 20 Sep 1994 19:15:22 +0700 (SST)
From: ASIRENE@NTUVAX.NTU.AC.SG
Subject: Wanted: IC-22A 2M set (working)
Message-Id: <01HHCGXD00HE9LVCRG@NTUVAX.NTU.AC.SG>

Hi,

Sorry for taking up bandwidth, but if anyone wants to get rid of
a working IC-22A, e-mail me. I'm desperate for one. I get my license next
month and only the following sets are approved for 2M.

(In Singapore)

1. AEL TR-120
2. BELCOM BC-1500
3. CALTRON CT-72
4. ICOM IC-215
5. KENWOOD TR-2200A, TR-2200G
6. KENWOOD TR-7200, TR-7200G
7. ROUND DOLLAR HS-144
8. UTS V6M
9. YAESU FT-2F
10. YAESU FT-221

and IC-22A (waivered)

So if you have any of the above, and want to sell, let me know. I need it fast cos these guys, for some weird reason, want you to have your gear up by 2-weeks of the license issuance. Thanks.

73,
Daniel

From owner-qrp-l@netcom.com Tue Sep 20 05:27:22 1994
Message-Id: <9409200004.AA23793@ig1.att.att.com>
From: mvjfm@mvubr.att.com (James M Fitton +1 508 960 2577)
Date: 20 Sep 94 00:05:00 GMT
Subject: Who I worked

We are in the final hours of editing "72" newsletter for the QRP club of New England.
If you have anything to say, say it now, or forever hold your straight key.

Sorry Bill, N8ET.....

Stations W1FMR/1 worked on ARP-AFIELD #1

20m.....

* * *
VE2DRB WA2HNA KR4DR N1CUU N2WEL W8AC K3SS W7YHA N03J N4ELM

WG4T K3WWP W3TS WA2EKW WN3W

40m.....

* * *
KP4DDB K9FFQ NN9K/0 WA9PWP KR4NR AA0NB N0OCT WU7F W4TW AA5EA
N0IQQ AA7QU

27 stations 17 SPC ~1836 points

* Folks that I am pretty sure are on Inet.

72 Jim W1FMR

From owner-qrp-l@netcom.com Tue Sep 20 17:50:40 1994
From: nobody@Kodak.COM ()
Date: Tue, 20 Sep 94 12:59:30 -0400
Message-Id: <9409201659.AA21690@Kodak.COM>
Subject: WINTER ANTENNA FARM

Date: 09/20/94 12:55:44

To: qrp-1@netcom.com

>From: Paul Mackanos, Capital Management 1/23/KP 24301, (x13966)

Subject: WINTER ANTENNA FARM

Anyone got any good ideas for some WINTER antennas, like wire gain antennas that would fit my bill for the NorthEast ?? The pool is covered and the XYL doesn't care what the backyard looks like until Spring arrives again.....
72 de Paul K2DB

EMAIL: KP26.594646@KODAKO.KODAK.COM

PAGER: (716) 781-3966 (Digital)

Paul